

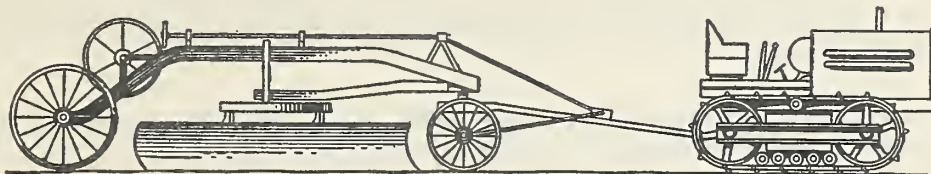
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CONSTRUCTION



HINTS

UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE
WASHINGTON, D. C.

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Number 8.

The attention of the Washington office has been called to a typographical error in Engineering Field Tables. In Table XIV, Natural Sines and Cosines, page 44, the sine of $16^{\circ}-45'$ is given as 0.26820. This should be 0.28820. The mistake is obvious but to avoid errors it would be advisable for those using the tables to make the correction therein.

Mr. Wiederhold of the Washington office advises that the steering on Dodge trucks should be watched. The nature of the trouble is described on page 2.

The saw-filing room described on page 2 and illustrated on page 3 was designed by Camp Wellston F-68, Manistee National Forest.

Mr. Groben of the Washington office offers suggestions to protect wood posts from decay. These appear on page 4.

E. S. Massie, Jr.
Editor.

Watch Dodge Steering

A number of cases of rapid wear of the ball joint connecting the drag link and steering arm have been reported on the Dodge trucks.

This wear takes the form of a cutting action directly below the ball and is caused by the socket cutting in at this point when making sharp right turns.

So far only one failure has been reported, but it is recommended that these joints be examined and both socket and joint be replaced if necessary.

This trouble was called to our attention by H. F. Watt and Sol. Stellfox supervising mechanics of Pennsylvania.

It appears that the Dodge Company have discovered this defect and are now supplying a new type socket. In the original socket the ground portion terminates at a sharp edge and it is this edge that has been responsible for the cutting action.

In the new sockets the ground portion terminates in a beveled edge.

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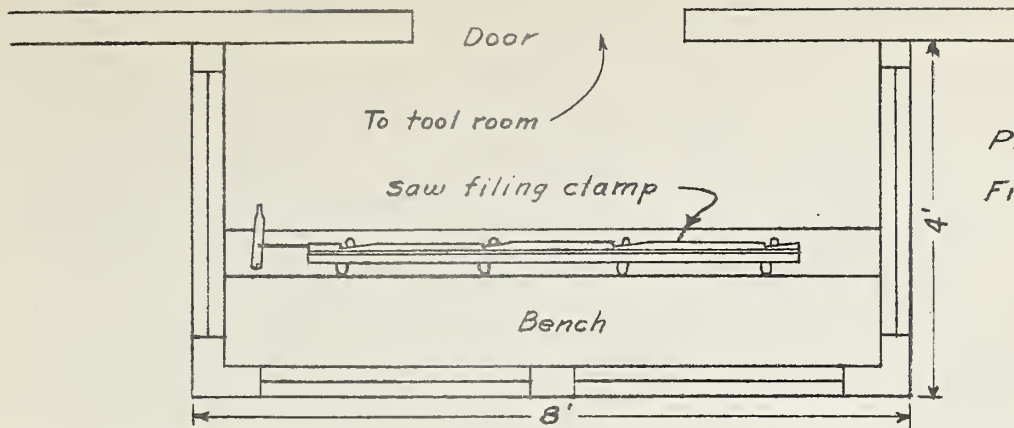
Saw-Filing Room

The following is a description of the saw-filing room added to the toolhouse at Camp Wellston, F-68. Six salvage windows were used, two over the bench, one at each end and two in the roof overhead. The bench itself is 43" above the floor and on it is mounted a simple yet effective saw clamp. The crosscut saw clamp is supported on a 2 $\frac{1}{2}$ " x 6" plank. The rear member is fixed and backed by heavy wooden pins set into the bench. The front member is moved by means of a rod and lever device so that the harder the lever is pushed the tighter the clamp holds the saw.

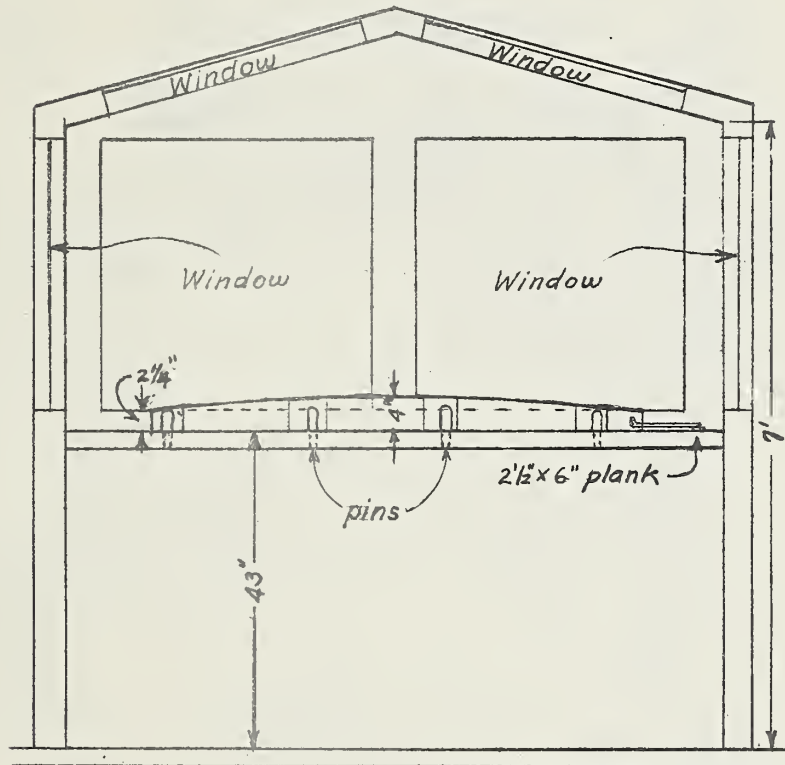
The clamp for handsaws is mounted on a wooden block having steel hangers which can be put into the clamp for the large saws and then be clamped tight.

SAW FILING ROOM

Scale 1"=2'



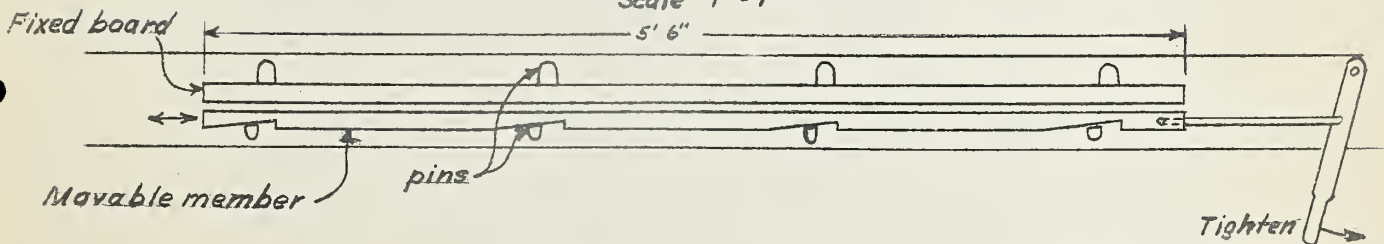
Plan of
Filing Room



Elevation of
Filing Room

Detail of SAW FILING CLAMP

Scale 1"=1'



SAW FILING ROOM & CLAMP
CAMP WELLSTON F-68

Designed by C. Moyd
Drawn by A.R.Y.

Scale: As shown
May 11, 1940

To Protect Wood Posts from Decay

Wood porch posts, columns, etc., are more apt to deteriorate at the base than anywhere else.

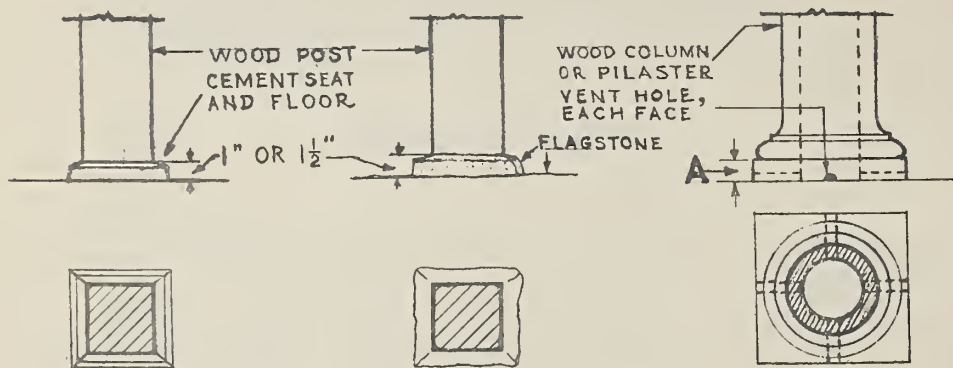
Paint or stain preserves them except at this particularly vulnerable point where the end grain rots and decays very rapidly due to exposure to alternate wet and dry conditions.

It is of paramount importance that the Forest Service itself observe the best practice of preserving wood when used outdoors under these and similar circumstances.

Wood posts, resting upon wood floors, are especially susceptible to decay because both contact surfaces, being wood, retain the moisture.

Here, a separate, removable, durable, wood seat, "A", may be inserted, to confine any deterioration to this portion only, and, thereby, protect the column proper. Air circulation, by means of small vents, not exceeding a 1/2" semi-circle, aid in prolonging the life of the wood seats.

The following diagrams have been prepared to illustrate the precautions to be taken to provide protection against decay.



Sometimes, a sheet of lead is inserted between the bottom of a wood post and the masonry floor which, being only 1/4" or less in thickness, is not as effective as that of the greater elevation of 1 or 1-1/2" illustrated above.

W. Ellis Groben
W. ELLIS GROBEN,
Consulting Architect.